

# Easy Weigh<sup>®</sup>

OWNER'S MANUAL

**MODEL: LS-100**

**LABEL PRINTING SCALE**



VER 2.00

## **PREFACE**

---

Easy Weigh<sup>®</sup> would like to thank you for purchasing our model LS-100 Price Computing Label Printing scale. We are committed to creating high quality low maintenance products and supplying our customers with diligent customer service. This manual contains information on the proper assembly and use of the scale.

### **Disclaimer:**

This company makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties of merchantability or fitness for any particular purpose. Any software described in this manual is sold or licensed "as is". Should the programs prove defective following their purchase, the buyer (and not this company, its distributors, or its dealers) assumes the entire cost of all necessary servicing, repair, and any incidental or consequential damages resulting from any defect in the software. Further, this company reserves the right to revise this publication and to make changes from time to time in the contents hereof without obligation to notify any person of such revision or changes.

Copyright<sup>®</sup> 2005, All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior expressed written permission of Easy Weigh<sup>®</sup>.

Brand and product names are trademarks and/or registered trademarks of their respective companies.

# TABLE OF CONTENTS

<b>General</b>	
Introduction .....	1
Specifications .....	1
Options & Accessories .....	2
Support & Service .....	2
<b>Unpacking &amp; Assembly</b>	
Box Contents .....	3
Assembling the Display .....	4
<b>Nomenclature</b>	
Scale Overview .....	4
Displays .....	7
Printer & Label Installation .....	8
Numeric Keypad .....	11
Speed Keys .....	12
Alpha Keypad .....	13
<b>Proper Operation</b>	
Safety First .....	14
Do's & Don'ts .....	15
Location & Environment .....	16
Maintenance .....	16
Power Requirements .....	18
<b>Set Up</b>	
Quick Start .....	19
Password .....	21
<b>General Programming</b>	
Main Menu .....	22
Time & Date .....	23
Store Name & Address .....	24
Scale Number .....	24
Groups .....	25
Group Assignment .....	26
Label Settings .....	26
Password Change .....	28
<b>PLU Programming</b>	
Miscellaneous PLU Programming .....	28
Creating & Editing PLUs .....	29
Speed Keys .....	37
Quick Price Change .....	37
Deleting PLUs .....	38
<b>Advanced Programming</b>	
Print Field Suppression .....	39
Temporary Date Print Inhibit .....	40

Sensor Settings .....	41
Barcode Settings .....	42
Backlight Settings .....	44
Date Format .....	44
Auto Print Setting .....	45
PLU Temporary Price Change Setting .....	45
PLU List .....	46
Deleting All PLUs .....	47
PLU Memory Status .....	48
<b>Sales Mode</b>	
PLU Key & Calling Up PLUs .....	48
Miscellaneous PLUs .....	49
Zero Key .....	50
Tare Key .....	51
Save Key .....	52
Auto Key .....	53
Pre-Pack Key .....	53
Set Key .....	54
Esc Key .....	54
Func. Key & Voiding .....	55
X Key .....	55
For Key .....	56
Feed Key .....	56
Print Key .....	58
C Key (Clear) .....	58
1/2 & 1/4 Keys: Fractional Pricing .....	59
<b>X/Z Mode: Sales Reports</b>	
X: Group Sales .....	60
X: PLU Sales .....	61
Z: Scale Sales .....	62
<b>Advanced Topics</b>	
Scale-to-Scale Data Transfer .....	64
PC-to-Scale Data Transfer .....	65
Self Test .....	65
<b>Appendix A: Label Format Library</b> .....	66
<b>Notes: Easy Weigh Dealer</b> .....	71

## Introduction

The LS-100 Label Printing scale has been designed with many advanced features, user-friendly menu driven programming, and high quality construction. In a grocery, deli store, or in a small supermarket the LS-100 is an upper tier stand-alone scale.

Using an advanced 4 inch per second printer, the LS-100 issues crisp, clear, and easy-to-read labels every time. With many other features like 60 Speed Keys, password protection, and high capacity weighing we are certain that you will find the LS-100 will meet all of your scale needs.

## Specifications

Model:	LS-100		
Maximum Capacity:	30 / 60 lb <b>Dual Range</b>		
Minimum Graduation:	Dual Range 0 to 30 lb x 0.01 lb / 30 to 60 lb x 0.02 lb		
Maximum Tare:	Half Capacity 0.00 to 29.99 lb		
Internal Resolution:	60,000 Counts (minimum)		
A/D Conversion Rate:	9 Updates / second		
Direct PLU Keys:	60 Direct PLUs ( <b>Speed Keys</b> )		
PLU Memory:	1000 PLUs Standard		
Group Memory:	100 groups, 20 characters per group		
Communications:	1 RS-232 port (COM1), for Scale-to-Scale or PC-to-Scale		
Label Sizes:	Width: 10 mm to 60 mm (0.40" to 2.36") Length: 20 mm to 100 mm (0.79" to 3.94")		
LED Pricing Displays:	Weight:	5 Digits, 999.99	(60 lb max)
	Unit Price:	6 Digits, 99999.99	max
	Total Price:	7 Digits, 99999.99	max
LCD Alpha Display:	256 x 32 pixels		
Platter Size:	Width:	418 mm / 16.5"	
	Length:	260 mm / 10.2"	
Product Dimensions:	Width:	460 mm / 18.1"	
	Length:	440 mm / 17.3"	
	Height:	470 mm / 18.5"	
Power Requirements:	100 ~ 240V AC @ 50/60 Hz ±5%		
Operating Temp:	- 10 °C ~ 40 °C, RH 35% ~ 85%(no condensation)		
Fuse:	1.6A, 250V, 20mm fuse.		
Power consumption:	Approx. 40 Watts		

## Options & Accessories

---

The following options are available through your Easy Weigh dealer:

Description	Part Number
Fish Pan Platter	260-10007-020010
Spill-Proof Overlay (Wet cover)	102-10007-020000
AC Power cord, USA, 120V AC	690-00001-02002M
Adjusting feet (set of 4)	4B0-00001-020000
LS-100 Scale-to-Scale Cable	600-10007-00001M
LS-100 Software Package	(Contact your local Easy Weigh Dealer.)

For any type of service or troubleshooting, please contact your nearest Easy Weigh dealer. Only licensed individuals can service, repair, or disassemble this or any scale; if you attempt to do this yourself, you may be subject to fines and may void your warrantee.

## Support & Service

---

Easy Weigh (EW) is committed to offering the best products and the best service. EW manufactures all of its products using only the best components available and thoroughly tests all of its products to assure a maximum level of quality and dependability. Whether its the initial installation of our devices, maintenance/repair work, or simply answering questions about our products, EW and all of our Authorized Dealers are highly trained to assist you with any need regarding EW products.

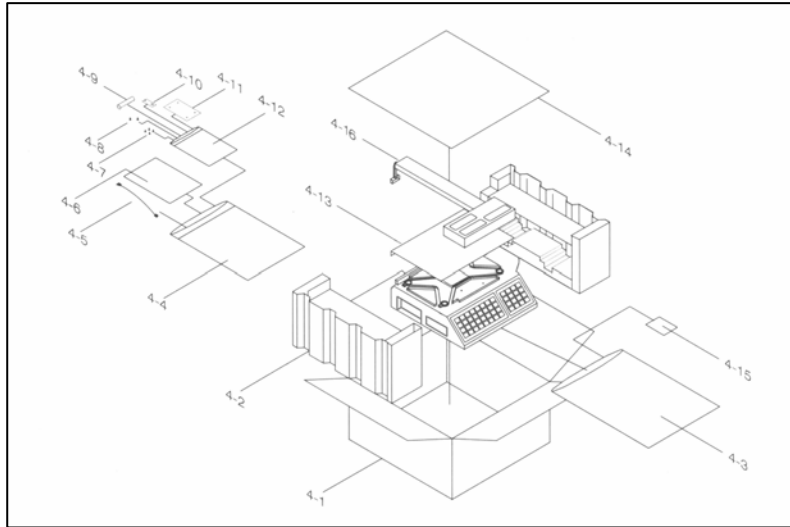
EW offers service and support to all of its US products through its network of Authorized Dealers. To find the EW Authorized Dealer nearest you, please contact EW or visit our website at:

**[www.easyweighscales.com](http://www.easyweighscales.com)**

The EW family of Authorized Dealers is always ready to assist you. Should you need warranty service, supplies, or even have some questions about any of our products, don't hesitate to call on us! Remember that your first contact should always be the local EW Authorized Dealer whom you purchased the scale from.

## Box Contents

Your LS-100 scale should come with the following:



NO	Parts Name	Units	QTY
4-1	IN CARTON BOX	EA	1
4-2	STYROFOAM	EA	2
4-3	BODY POLY BAG	EA	1
4-4	MANUAL POLY BAG	EA	1
4-5	AC CORD	EA	1
4-6	MANUAL	EA	1
4-7	PAN SCREWS	EA	4
4-8	CAL SEALING	EA	2
4-9	FUSE	EA	1
4-10	CAL PLATE AND GASKET	EA	1
4-11	BRACKET COVER	EA	1
4-12	FUSE POLY BAG	EA	1
4-13	PLATTER	EA	2
4-14	BOX PAD	EA	1
4-15	SILICA DESICCANT	EA	2
4-16	POLE DISPLAY	EA	1

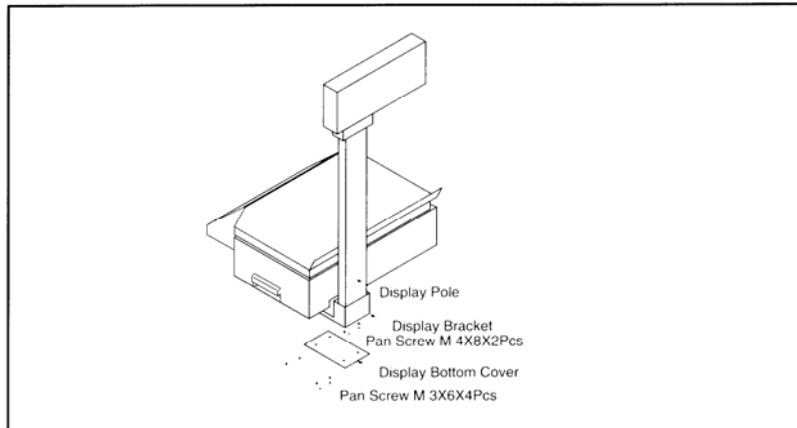
## Assembling the Display

---

Once you have unboxed your LS-100 you must carefully follow the instructions below on how to assemble the Pole Display.

### Installing the Pole Display:

1. Connect the display connectors together.
2. Place the Pole Display properly into the bracket making sure that the connectors are slipped inside of the pole (upwards.)
3. Attach the two display pole screws (Pan Screw M4x8) to securely fasten the pole to the bracket.
4. Finally, attach the bracket-plate to the bracket and fasten it with the 4 smaller screws (Pan Screw M3x6).



*Note: Make certain that none of the wires are being crimped when you are installing the pole display.*

## Scale Overview

---

The LS-100 is a simple price computing label printing scale. There are certain parts of the scale that you may need to become familiar with in order to properly maintain and operate the scale.

Take a look at the diagrams provided and the table following them. These will point out the most vital components of the scale that are involved in day-to-day operations and maintenance.

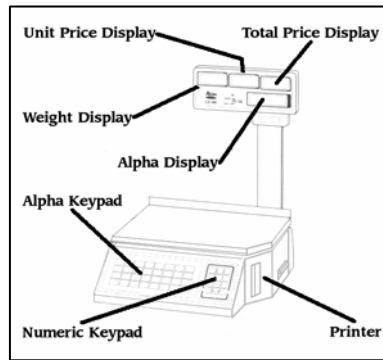


**Front View:**

The *Weight Display* is where all weight data is displayed.

The *Unit Price Display* is where the scale displays price-per-pound data as well as the Piece count for By Count items.

The *Total Price Display* is where the scale shows the Total Price.

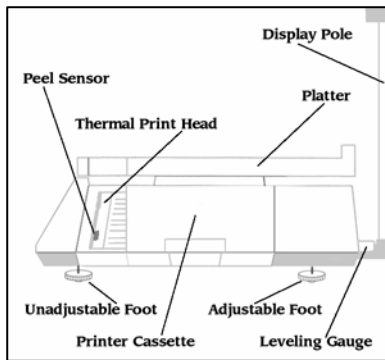


The *Alpha Display* is where the scale displays the PLU Name. During programming, this display is also used to display menu information and text.

The *Alpha Keypad* is where all of the Speed Keys are located. During programming, this keypad is also used to navigate menus, enter special functions, and typing text data.

The *Numeric Keypad* is where all numeric data is entered.

The *Printer* area is where the label comes out of.



**Right Side View:**

The *Display Pole* is what the display head is mounted on.

The *Leveling Gauge* is used to make sure that the scale is level.

The *Adjustable Foot* can be adjusted to affect the level of the scale. It is used with the leveling gauge during installation.

The *Unadjustable Foot* cannot be adjusted; instead, use the other 3 to adjust the level of the scale.

The *Printer Cassette* is a drawer mechanism that is pulled out of the scale in order to load new label rolls or service the printer.

The *Thermal Print Head* is the printing element that prints the thermal labels. Never touch this part as it can get extremely hot during the print cycle. From time to time you may need to clean the print head; see *Proper Operation, Maintenance* section.

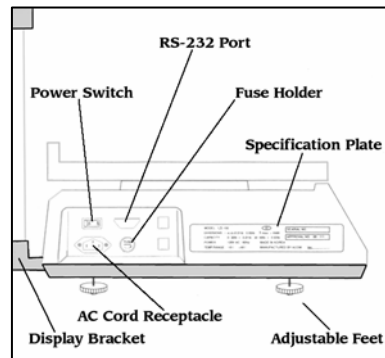
The *Peel Sensor* is used by the printer to determine if you have removed a printed label that is sitting on the peel-off bar. If this sensor becomes blocked, the scale will not print.

The *Platter* is used to place commodity items to be weighed and/or labeled. The platter may need cleaning from time to time; however, you must remove the platter from the scale platform whenever you clean it.

**Left Side View:**

The *Display Bracket* is where the display pole is attached to during installation.

The *Power Switch* is used to turn the scale on or off; however, even though the switch is in the off position it is best to unplug the scale whenever working on any wiring or during installation.



The *AC Cord Receptacle* is where the power cord is plugged into.

The *Adjustable Feet* can be adjusted to affect the level of the scale. There are 3 adjustable feet and 1 unadjustable foot which is located under the printer towards the front of the scale.

The *Specification Plate* contains scale data like capacity, serial number, version, approval numbers, power requirements, and other manufacturer data.

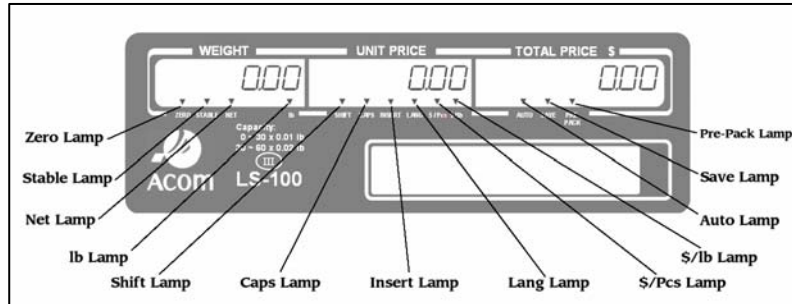
**TCP/IP Network: For availability, please contact us.**

The *Fuse Holder* contains a 1.6A 250V 20mm safety fuse. You may need a flat screw driver to open the fuse holder but make sure that the scale is unplugged from an AC source and turned off before you do this.

The *RS-232 Port* is a DB-9 female connector that is used to connect to a PC or one other scale for scale-to-scale data transfer. It has the standard 3 wire PC pin configuration of: 2-RXD, 3-TXD, and 5-SG.

## Displays

This is the user's side display window.



The *Zero Lamp* is on to indicate that the scale is at the center of zero when the scale is at gross zero (no tare is present), or it indicates that the scale is at net zero (there is a tare is present and the Weight Display shows 0.00.)

The *Stable Lamp* is on to indicate that the weight is stable.

The *Net Lamp* is on to indicate that there is a tare present.

The *lb Lamp* is on to indicate that the scale is displaying pounds.

The *Shift Lamp* works with the Shift key and works the same as a PC.

The *Caps Lamp* works with the Caps Lock key and works the same as a PC.

The *Insert Lamp* works with the Ins key. When on, it means that the scale is in insert-text mode; when off, it means that the scale is in overwrite-text mode.

The *Lang Lamp* determines the language setting for the keyboard. When off, it means that the scale is in English mode; when on, it means that the scale is in 2<sup>nd</sup> Language mode.

The *\$/Pcs Lamp* indicates that the value in the Unit Price Display is a piece count for a By Count PLU. For example, if the Unit Price Display shows a 3 and the Total Price Display shows 1.00, then this is understood to mean “3 for \$1.00.”

The *\$/lb Lamp* indicates that the value in the Unit Price Display is a price-per-pound for a By Weight PLU. For example, if the Weight Display shows 2.00, the Unit Price Display shows 2.00, then the Total Price Display will show 4.00 because  $2.00 \text{ lb} \times \$2.00 = \$4.00$ .

The *Auto Lamp* works with the Auto key. When on, it means that the scale is in auto-print mode; when off, it means that the scale is in manual-print mode. Auto-print will only print automatically whenever the weight returns to gross zero.

The *Save Lamp* works with the Save key. When on, it means that the scale is in save mode; when off, it means that the scale is in auto-clear mode. Auto-clear will clear out the tare and price whenever the weight returns to gross zero.

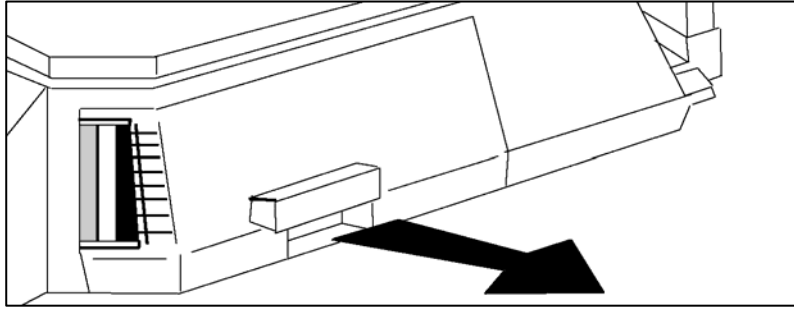
The *Pre Pack Lamp* works with the Pre Pack key. When on, it means that the scale is in pre-pack mode; when off, it means that the scale is in manual mode. Pre Pack mode will prevent the auto-clear from working and will print automatically whenever the weight deviates by 0.01 and stabilizes. The deviation value is adjustable; see *Advanced Programming, Auto Print Settings* section.

## **Printer & Label Installation**

---

The LS-100 has a high speed thermal printer that prints at 100 mm per second (4” per second.) It has a heavy-duty removable cassette drawer that is used to load the thermal labels into the scale.

Make sure that the Power Switch is off. Pull on the cassette handle to remove the cassette drawer.

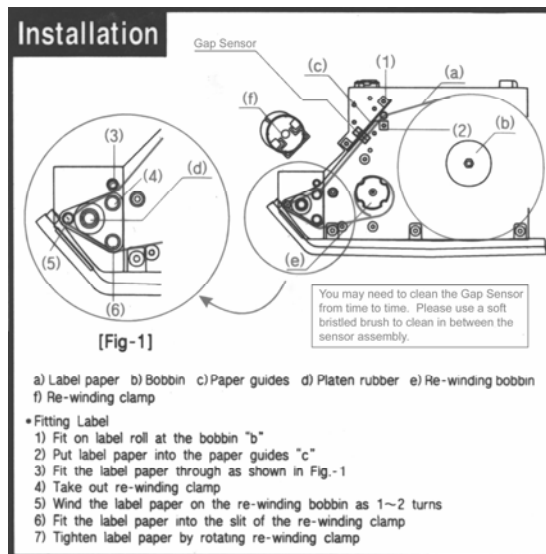


Once you have removed the cassette drawer you may follow the instructions shown on the large sticker labeled "Installation" on the cassette mechanism.

### Removing Labels:

When the printer runs out of labels:

1) Pull and remove the Pick-up Clamp (f). When you do so, some of the backing paper may rip; this is normal. Remove the excess collected backing paper from the Pick-up Clamp (f) and discard the paper making sure NOT to throw out the clamp.

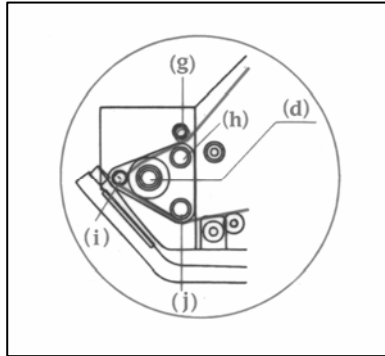


2) Remove and discard the cardboard label core which should be located on the Label Roll Spool (b) making sure NOT to throw out the Label Roll Spool (b). Make sure to also discard any excess labels and/or backing paper along the label path. The label path is shown in red on the Installation sticker in the cassette drawer.

### Installing Labels:

Once you have followed the instructions for removing labels you can install a new label roll by taking the new label roll and remove about 30 cm (approx. 12") of labels from the backing paper of the new label roll and then do the following:

- 1) Place the new label roll onto the Label Roll Spool (b).
- 2) Thread the backing paper through the Pressure Plate (c).



3) Next, thread the backing paper between the Label Guide bobbin (g) and (h).

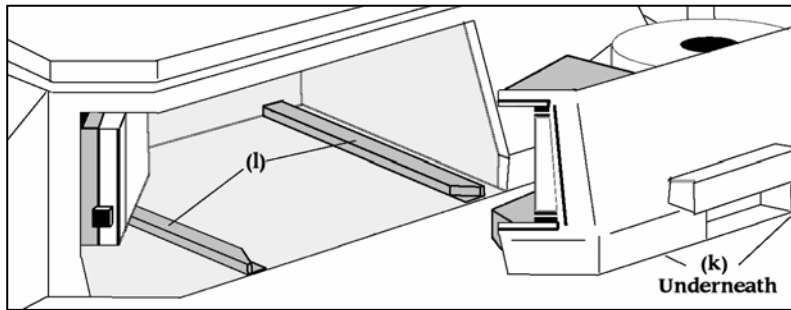
4) Then, thread the backing paper over the Platen (d) and over the Label Guide bobbin (i) so that the backing paper is NOT between Platen (d) and the Label Guide bobbin (i).

5) Next, thread the backing paper under the Label Guide bobbin (j) so that the backing paper is NOT between Platen (d) and the Label Guide bobbin (j).

6) Then, wind the backing paper over the Pick-up Motor Shaft (e) about 1 turn.

7) Next, fit the Pick-up Clamp (f) over the Pick-up Motor Shaft (e) so that the backing paper slides through the slit located on the Pick-up Clamp (f). Also, make sure that the Pick-up Clamp (f) slides all the way into the Pick-up Motor Shaft (e)

8) Then, wind the Pick-up Clamp (f) until the edge of the first label is aligned with the Platen (d). When done, make sure that the lever located on top of the Pick-up Clamp (f) is folded down against the Pick-up Clamp (f).



9) Finally, slide the cassette drawer back into the scale making sure to align the Metal Rails (k) of the cassette with the Plastic Rails (l) of the scale. **After you turn the scale on you must feed out 2 or 3 labels using the FEED key.**

When you remove the cassette drawer from the scale the printer bay is exposed. You should only remove the cassette drawer when replacing labels or servicing the printer; you should never leave the printer bay exposed for long periods of time. **Whenever you remove the cassette drawer, you must feed out 2 or 3 labels using the FEED key when finished.**

## Numeric Keypad

ZERO	TARE	AUTO	SAVE	SET
7	8	9	Func.	ESC
4	5	6	PRE-PACK	PLU
1	2	3	X	FOR
0	C	FEED	PRINT	

The Numeric keypad is the 25 keys on the right-side of the keyboard.

*ZERO* Key is used to manually set the zero point.

*TARE* Key is used to enter and clear manual or sampled tares.

*AUTO* Key is used to turn Auto-print mode on or off.

*SAVE* Key is used to turn Save mode on or off. When Save mode is on, the scale will not auto-clear tares and/or unit prices; when off, tare and unit prices will auto-clear.

*SET Key* is used to enter the Main Menu (programming mode.) You may be required to enter a password to access programming mode.

*Numeric Keys (0 to 9)* are used to enter numeric data like tares, prices, pieces, etc.

*Func. Key* is used to void sales transactions.

*ESC Key* is used to enter Sales mode whenever you are at the Main Menu; otherwise, it will backtrack through the menu system.

*PRE-PACK Key* is used to turn Pre Pack mode on or off. When Pre Pack mode is on, the scale will auto-print and NOT auto-clear tares and/or unit prices; when off, the scale will NOT auto-print and will auto-clear tares and/or unit prices.

*PLU Key* is used to call-up PLUs by number.

*X Key* is used to print copies of labels (multiple labels.)

*FOR Key* is used for pricing By Count PLUs.

*C Key* is the Clear key and is used to clear numeric entries. If you press Clear when the cursor is on a text field, then all text to the right of the cursor will be erased.

*FEED Key* is used to feed out labels so that the printer can be properly aligned. Whenever labels are fed out, a test pattern is also printed on them so that the user can determine if the print head needs cleaning or servicing.

*PRINT Key* is used to manually print labels and also functions as an "Enter" key during programming.

## **Speed Keys**

---

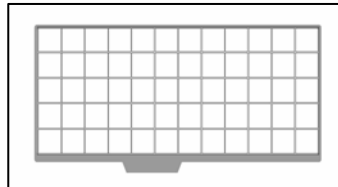
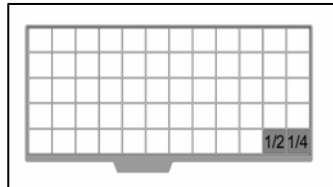
The Alpha Keypad functions as Speed keys whenever you are in sales mode. The LS-100 has 60 Speed keys that are programmable to select any 60 PLUs you desire. By default, Speed keys 1 to 60 are assigned PLUs 1 to 60 respectively.



There is a Speed Key Template which you can pull out of the Alpha Keypad. This template can be used to write or label each of the 60 keys. You can also use our digital template available in Microsoft® Word format included with the LS-100 Software Package. Its is also available as a free download on our website at:

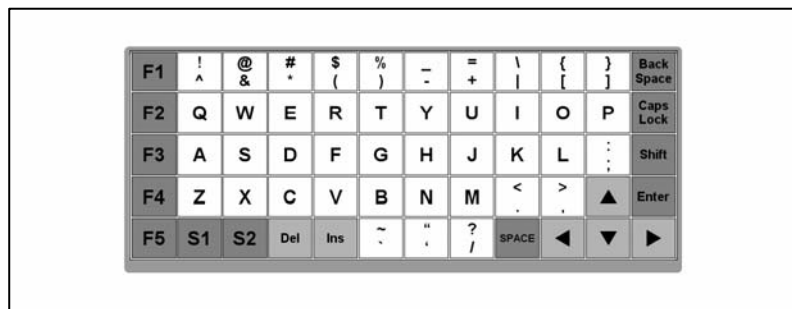
<http://www.easyweighscales.com/>.

The LS-100 has a fractional pricing feature which enables you to price items at ½ pound or ¼ pound. This feature can only be enabled by an Easy Weigh Dealer. You can use the Fractional Pricing Speed key template that is available on our website.



## Alpha Keypad

Whenever you need to access the Alpha Keypad, you must remove the Speed Key Template so that you may see the Alpha keys that lie below.



*F1 Key* is used to access the *PLU Quick Price Change* programming feature from the Main Menu.

*F2 Key* is used to enable & disable the Temporary Date Print Inhibit.

*F3 to F5 keys* are reserved for future use.

*S1 Key* reserved for future use.

*S2 Key* changes between languages: when the Lang Lamp is off, then the scale is in English typing; when on, the scale is in 2<sup>nd</sup> language mode. **Note: The maximum number of characters that you can type in any text field is cut in half when you use the second language; because, the second language uses DBCS (Double Byte Character System.)**

*Del Key* is used to delete characters like on a PC.

*Ins Key* is used to switch between Insert and Overwrite typing mode.

*SPACE Key* is used to enter a space character like on a PC.

▼▲◀▶ keys are used to navigate menus & sub-menus like on a PC.

*Enter Key* is used like an Enter key on a PC.

*Shift Key* is used like a Shift key on a PC except that it is temporary: you must press it before every upper case letter.

*Caps Lock Key* is used like a Caps Lock key on a PC.

*Back Space Key* is used like a Back Space key on a PC.

“*QWERTY*” keys are used like the keys on a PC.

## **Safety First**

---

It is extremely important to be aware of personal safety whenever operating or maintaining this equipment. Wherever possible, we have tried to place warning labels and other helpful indicators at the actual location on the equipment where the danger is most apt to occur; however, it is not always possible to foresee all dangerous situations. Warnings and cautions that are necessary for the safe operation of the scale are contained in this manual. Please, make sure to carefully read ALL warnings and cautions before operating the scale.

## Do's & Don'ts

---

Please observe the following:

- ❑ Unplug and shut the scale OFF whenever you are changing the label roll or working in the printer bay.
- ❑ The outlet that the scale is plugged into should be properly grounded and have the correct voltage supply.
- ❑ Maintain a static free work area.
- ❑ Never use any other equipment on the same electrical line; the scale should have a dedicated line.
- ❑ Place the scale far from strong RF (radio frequency) interference.
- ❑ Level the scale using its adjustable feet; however, be careful not to try and adjust the foot that is under the printer towards the front of the scale.
- ❑ Do not subject the platter to sudden impacts or drop anything onto the platter.
- ❑ Do not spill the water or any other liquid on the scale.
- ❑ Do not use any solvents to clean the scale.
- ❑ Do not remove the safety ground on the power cord.
- ❑ Do not store thermal labels where they may be subject to: direct sunlight, high humidity, high temperature, or dust. Doing so may damage and/or hinder the quality of the print on the labels. Be sure to also follow any other label-manufacturer guidelines.
- ❑ Do not press the keys using excessive force; the keys will operate correctly if they are pressed lightly. If any keys should fail to work, please contact your Easy Weigh Dealer.
- ❑ Do not use any label media other than that recommended by Easy Weigh. Please contact your Easy Weigh Dealer for details.
- ❑ Do not attempt to affect repairs to this equipment; unlicensed individuals affecting repairs on legal for trade devices can be subject to fines in all 50 states as well as voiding your warrantee. Contact your local Easy Weigh Dealer for service or repairs.

## Location & Environment

---

This scale must be placed on a flat and stable surface. Please keep the scale away from the direct path of ventilation equipment, strong drafts, or direct sunlight. These air disturbances can be picked up by the scale's sensitive weighing sensors and may cause incorrect weight readings.

If the scale is not properly leveled, please adjust the 3 adjustable legs at the bottom of the scale. DO NOT adjust the leg that is under the printer and closest to the front of the scale. Adjust the height of each of the 3 adjusting feet so that the leveling gauge indicates that the scale is level. The leveling gauge is located to the right of the display pole bracket on the rear of the scale. You will know that the gauge indicates "level" when the bubble is in the center of the marked circle.

Please avoid the following hostile environments:

- Temperatures exceeding **-10° C to 40° C (14° F to 104° F)**.
- Excessive vibration or instability.
- Unstable or flimsy surfaces to use the scale on.
- Dusty, dirty, or excessively wet environments of any kind.

The scale should be installed in a dry and liquid free environment. When the scale is installed in a high humidity or wet-type environment, be sure to avoid spilling or spraying anything onto the scale. If you must operate in this type of environment you MUST use the Spill-Proof overlay with the LS-100. You can get this optional item from your Easy Weigh Dealer. Failure to use this item may void your warrantee.

## Maintenance

---

This scale's exterior should be cleaned with a damp cloth or rag and a mild soap solution. Do not spray any liquids directly onto the LS-100. Always spray any cleaning fluids onto the cloth rag you are using to wipe the scale. Remember, NEVER to hose-down the scale. Before doing any type of cleaning, always make sure to turn the Power Switch off and unplug the scale from any AC outlet.

The keyboard should be cleaned with a damp cloth rag and a mild soap solution. Do NOT spray any liquids or chemicals directly onto the keyboard as these may cause damage to the seals and then cause the keyboard to fail. Do NOT use any harsh solvent or chemicals to clean the keyboard as these may discolor or completely remove the graphics on the keyboard.

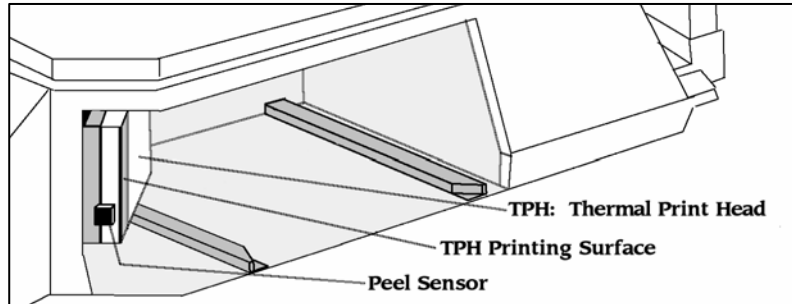
The displays should be cleaned with a damp cloth rag and a mild soap solution. Do NOT spray any liquids or chemicals directly onto the displays as these may cause damage to the seals and then cause the displays to fail. Do NOT use any harsh solvent or chemicals to clean the displays as these may discolor or completely remove the graphics on the display windows.

To clean the platter, please carefully remove the platter from the scale platform and wash the platter in a mild soap solution. You can wet or submerge the platter if desired. Do not use any chemicals that may cause damage to stainless steel. Make sure that the platter is COMPLETELY dry before attaching to the scale platform. Also, do not use excessive force when reattaching the platter to the scale.

The printer bay also requires cleaning; however, this process requires more scrutiny as there are many sensitive components inside the printer bay. Remember, make sure to turn the Power Switch off and unplug the scale from any AC outlet. Remove the cassette drawer mechanism from the scale. Then, with a soft bristled brush or tooth brush, swipe away any debris that may have accumulated in the printer bay's base. Do NOT touch any other surface ESPECIALLY the thermal print head. If you scratch the print head, it will need to be replaced; scratches are not covered under warranty.

Finally, the TPH (thermal print head) may need cleaning from time to time. You must be very careful when cleaning the TPH because this is the most expensive and delicate printer element. It is recommended to clean the TPH every time you change the label roll or whenever a label becomes stuck on the TPH. If you cannot remove a stuck label or clean the TPH, DO NOT attempt to fix the problem yourself; instead, contact your local Easy Weigh Dealer.

To clean the TPH, begin by removing the cassette drawer from the scale. Next, using a cotton swab dipped in Denatured Alcohol, gently slide the cotton swab over the TPH Printing Surface. You can do this until the alcohol evaporates, but never use excessive force on the TPH. You can also swab down the Peel Sensor as this device may also accumulate dust or debris.



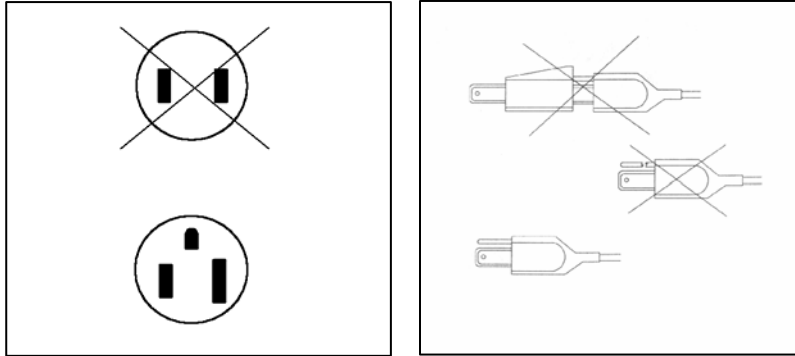
You can also use a TPH Cleaner Pen instead of the cotton swab and Denatured Alcohol. The pen is available through your Easy Weigh Dealer. When you are done cleaning the TPH, you can replace the cassette drawer mechanism and test the print quality using the FEED key. Make sure that the TPH and the Peel Sensor are COMPLETELY dry of the alcohol before plugging the scale into an AC outlet. You may also need to clean the Gap Sensor from time to time. To do so, please follow the instructions located on the cassette drawer. If you require more thorough or robust cleaning, please contact your Easy Weigh Dealer.

## Power Requirements

The LS-100 is designed to be used virtually anywhere in the world. Like many appliances of today, the LS-100 is designed with an automatically switch power supply (ASPS.) this allows operation when connected to an AC source supplying 85V to 240V AC at 50/60 Hz with a 5% tolerance.

Remember, an ASPS does not guarantee that a bad, noisy, or improperly wired power outlet will allow the scale to operate trouble

free. With that in mind, please make sure that the power outlet used with the LS-100 is a dedicated line with no high-noise devices (such as compressors, motors, etc.) plugged into the same line. Also, make sure that the wiring for the outlet is correct. If you are uncertain, please contact a certified electrician or your Easy Weigh Dealer. Additionally, the outlet must be a 3-prong outlet with a properly wired safety ground. NEVER remove the 3<sup>rd</sup> prong from the LS-100 AC cord or use a 3-to-2 adapter. Failure to follow any of these precautions can result in severe electrical shock.



Be sure to check the LS-100 Specification Plate located on the left side of the scale. The power supply specifications are listed there.

## Quick Start

To get started immediately, follow the instructions in the “*Easy Weigh LS-100 Quick Reference Guide*” that is included with your scale. We still recommend that you read this manual at least once. The Quick Reference Guide states the following:

### A. Basic setup:

1. Take the scale, pole display, platter, and accessories bag out of the box.
2. Install the pole display: **Note:** *Make certain that none of the wires are being crimped when you are installing the pole display.*
  - a. Connect the display connectors together.

- b. Place the Pole Display properly into the bracket making sure that the connectors are slipped inside of the pole (upwards.)
  - c. Attach the two display pole screws (2 larger screws) to securely fasten the pole to the bracket.
  - d. Finally, attach the bracket-plate to the bracket and fasten it with the 4 smaller screws.
3. Place the scale in the area where it will be used which should be a rigid and level surface. Using the leveling feet and leveling gage, make sure that scale is level. The leveling gage is located on the right-side rear of the scale by the pole bracket; the leveling feet are located at the bottom of the scale chassis. **Note:** *The leveling foot located on the front-right side of the bottom of the scale (closest to the numeric keypad) is **not** adjustable. Please **do not** try to adjust this leveling foot; instead, use the other three feet to adjust the level.*
4. Place the platter on the scale platform and then connect the AC cord to the LS-100. The AC cord (power cord) goes connected to the left-side of the scale; there is a label on the scale by the connector ports which indicates what each connector is for.
5. Make sure that the power switch is in the OFF position which is located above the AC cord connector.
6. Plug the scale into an AC source. **Note:** *The AC source must be 85V ~ 240V DC 50/60 Hz  $\pm 5\%$ .*
7. Turn the power switch to the ON position. The scale will do the display test and then go to zero.
8. Press the **FEED** key 2 or 3 times collecting the labels as they are fed out each time you press the key.
9. The scale should be in the **Initial State**; all the displays should read:



This is the **Initial State**. Most directions and instructions in this manual will begin with setting the scale up to the **Initial State**. Please familiarize yourself with how to get the scale to the **Initial State**: this state is achieved by simply turning the scale on. You are now ready to use the scale.



## Password

When you purchase an LS-100, it comes with password protection by default. The initial password is "0000"; four zeroes. You can disable all passwords or change the password. If your scale has password protection enabled, then you can change the password by following the instructions in the *General Programming* section under *Password Change*. If your scale has password protection disabled or you wish to disable password protection, you must contact your Easy Weigh Dealer to change this feature. Changing this feature is only permitted by licensed individuals.

There are only two places where the LS-100 will show the password entry screen: ① to enter the Main Menu and ② to void PLU sales. If you press **SET** or **Func.** from Sales Mode (*Initial State*) you will see the following screen:

### Input Password

This is your cue to enter the password; of course, if passwords are disabled then this screen will always be skipped. For a new scale, you would simply press **0** **0** **0** **0** **PRINT** and then the scale will proceed to the next screen.

Passwords are composed of the numbers 0 to 9 and must be 4 digits long. As you type your password, the Total Price display will display a dash for every number that you press. When you are done entering your password, press **PRINT**. If you entered the correct password you will go on to the next screen; if not, you will remain at the password entry screen.

If you wish to exit the password entry screen, press **ESC** and you will go back to Sales mode. Do not forget your password; write it down somewhere safe. If you forget your password, you will NOT be able to access the scale; the only way to correct this problem is to call your Easy Weigh Dealer who may have to clear out ALL of the scale's memory and completely reprogram the scale, which may or may not incur additional charges. **Note:** if you wish not to use passwords, have your Easy Weigh Dealer set your scale up accordingly.

## Main Menu

The Main Menu is where you can set all of your PLU programming, system options, and sales reports. The LS-100 menu tree is organized as follows:

<ul style="list-style-type: none"><li><b>1: PLU: Create &amp; Edit</b></li><li><b>2: PLU: Speed Keys</b></li><li><b>3: Store Settings</b><ul style="list-style-type: none"><li>1: Edit Store Name</li><li>2: Edit Group Name</li><li>3: Edit Misc. PLU</li><li>4: Edit Misc. UPC</li></ul></li><li><b>4: Time &amp; Date</b></li><li><b>5: Scale Settings</b><ul style="list-style-type: none"><li>1: Min Weight for Auto Print</li><li>2: Group Assignment</li><li>3: Scale Number</li><li>4: Date Format</li><li>5: Back Light Settings</li><li>6: Barcode Settings</li></ul></li><li><b>6: X/Z: Sales Reports</b><ul style="list-style-type: none"><li>1: X: Group Sales Report</li><li>2: X: PLU Sales Report</li><li>3: Z: Scale Sales Report</li></ul></li><li><b>7: Label Settings</b><ul style="list-style-type: none"><li>1: Label Feed Adjustment</li><li>2: Label Format Setting</li><li>3: Print Field Control</li><li>4: Sensor Setting</li></ul></li></ul>	<ul style="list-style-type: none"><li><b>8: SET: System Settings</b><ul style="list-style-type: none"><li>1: Self Test</li><li>1: A/D Board</li><li>2: Key Board</li><li>3: Display</li><li>4: RS-232C</li><li>5: Printer</li><li>6: Sensors</li><li>7: Sensor Cal</li></ul></li><li>2: Print PLU List</li><li>3: Trans Data</li><li>4: Price Change</li><li>5: <i>Memory Status</i></li><li>6: <i>Display PLU List</i></li><li>7: <i>Delete a PLU</i></li><li>8: <i>Delete All PLUs</i></li><li>9: <i>Password Change</i></li><li><i>F1: PLU Quick Price Change</i></li><li><i>F2: Temp. Date Print Inhibit</i></li></ul>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

*Italicized* items are menu items that are NOT displayed by the scale although they are accessible by typing their corresponding menu numbers. "PLU Quick Price Change" menu item is accessible from the Main Menu by pressing **F1**. The 8 **bolded** items are listed by the scale in the Main Menu. The above chart can be used to quickly access specific menu items. For example, if you are at the Main Menu and want to change the scale number you would simply press **5** and then **3**.

#### To enter Main Menu:

1. Start From the *Initial State* and press **SET**.
2. Enter the correct password and press **PRINT**.
3. The Main Menu display appears as follows:

### 1. PLU: Create & Edit

4. From here you can use the **▲** **▼** keys to navigate the Main Menu and then press **PRINT** or **Enter** when you arrive at the menu item you wish to select. You can also press the menu item's corresponding numeric key.

**Note:** the *Initial State* is also the Sales mode screen; for example, when you first turn the scale on and it goes to zero.



## Time & Date

#### To program the scale's time and date:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press **4**.
3. Using the numeric keys, enter the time in **HH:MM:SS** format (hours, minutes, and seconds) always entering 2 digits for each unit of time and using military hour format (00 to 23 hours.) You will see the time you typed in the Total Price Display.
4. Press **PRINT**.
5. Using the numeric keys, enter the date in **MM:DD:YY** format (month, day, and year) always entering 2 digits for each calendar unit. You will see the date you typed in the Total Price Display.
6. Press **PRINT** **ESC** **SET**.
7. You are back in the *Initial State*.

## Store Name & Address

---

You can print the store name and address or any other pertinent information, at the bottom of each label; however, not all labels or label formats have a space for the store name at the bottom. Additionally, some formats may have a line or character-per-line limitation not mentioned here. **Most USA label formats have 2 lines of store name data and 28 characters per line.**

### To program the store name and address:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press  .
3. You can now type the name, address, or any other data you would like to appear at the bottom of your labels. You can have up to 3 lines of data and up to 56 characters per line; however, these can change depending on your label format. As you type, you will see the text in the Alpha Display.
4. When you are done with line 1, press .
5. You can type the data you want for line 2 and press .
6. You can type the data you want for line 3 and press .
7. Press  .
8. You are back in the *Initial State*.

## Scale Number

---

If you have multiple scales in a store, you can assign a scale number to each of your scales so that you can discern the origin of generated labels. Additionally, sales reporting can also be made easy using scale numbers; however, it is not required to use scale numbers.

### To set the scale number:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press  .
3. Enter a scale number. This number must be from 1 to 32. As you type the number, it will appear in the Total Price Display.
4. Press   .
5. You are back in the *Initial State*.

## Groups

In order to better sort your PLUs, you can assign each PLU to any 1 of 99 groups. Just like PLUs can be named, each of the 99 groups can have a 20 character name. In a meat department, for example, you can put all of your beef products under group 1 and name group 1 "Beef". You can also use the groups to separate PLUs by various "departments" or use any hierarchical combination you desire; but, it is up to you to maintain the hierarchy. Of course, you do not have to use groups if you do not need them.

### To program the group names:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press **3** **2**.
3. Enter the group number you wish to edit. This number must be from 1 to 99. You will see the group number in the Total Price Display.
4. Press **PRINT**.
5. Type a group name that you wish to use for this group. As you type the name, you will see it displayed in the Alpha Display.



6. Press **PRINT**.
7. The group name was stored and the scale automatically moves on to the next group number which is displayed in the Total Price display.
8. If you wish to program the next group name, then you can go back to step 5; otherwise, press **ESC**.
9. You can go back to step 3 to specify another group number you may wish to edit or you can press **ESC** **ESC** **SET** to finish.
10. You are back in the *Initial State*.

## Group Assignment

---

Just like you can assign a PLUs to a certain groups, you can also assign a scale to a specific group. A new scale is assigned to group 1 by default. When you create PLUs, the default group assignment for that PLU becomes the scale's group assignment.

### To set the group assignment for the scale:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press  .
3. Enter the group number you wish to assign the scale to. This number must be from 1 to 99. As you type the number, you will see it in the Total Price Display.
4. Press   .
5. You are back in the *Initial State*.

## Label Settings

---

Label Settings covers the 2 most important printer settings: Label Format Setting (LFS) and Label Feed Adjustment (LFA.)

The LFS (Label Format Setting) tells the scale what label you are using and how you want it to print on that label. The LFS is a number from 1 to 999; however, the scale will only accept those values listed in the *Label Format Library, Appendix A*. The LS-100 is compatible with many competitor label formats and labels: please check the appendix.

**Common LFS Numbers:** 30 & 33.

### To set the Label Format:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press  .
3. Select the LFS number from the Label Format Library and press ; as you type the number it will appear in the Total Price Display. The default value is 1 and is the format for the labels that come with a new scale.
4. Press  .
5. You are back in the *Initial State*.

The LFA (Label Feed Adjustment) adjusts the print position of a label. It is independent of the LFS number and can range from 0 to 40; 20 being the default value. The higher the number the lower things will print on the label; the lower the number the higher things will print.

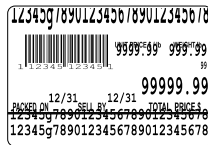
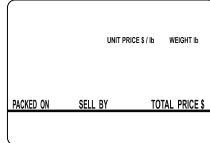
**To set the Label Feed Adjustment:**

1. Follow steps 1 to 3 of entering Main Menu.
2. Press **7** **1**.
3. Change the LFA number and press **PRINT**; as you type the number it will appear in the Total Price Display.
4. Press **ESC** **SET**.
5. You are back in the *Initial State*.

You may need to test print 2 or three labels to notice the change in adjustment. Additionally, you may need to repeat this procedure to get your desired alignment. **Note:** there is no way to individually align any fields (like Total Price, Sell By Date, etc.) If you cannot properly align the print, then one of the following may have occurred:

- You are using the wrong LFS number or have the wrong labels installed in the scale.
- You are using defective labels that have a “shift in registration” error. This means that when the labels were manufactured, the pre-printed color items on the label were printed too high, too low, or incorrectly. This problem occurs most often when you do not use Easy Weigh Certified Labels.

Here is a sample (blank) of the label that new LS-100s come with and some sample prints of labels that need adjustment:



## Password Change

---

You can change the password to any 4 digit number you want. The initial password is "0000"; four zeroes. If your scale has password protection disabled or you wish to disable password protection, you must contact your Easy Weigh Dealer to change this feature. Changing this feature is only permitted by licensed individuals.

Do not forget your password; write it down somewhere safe. If you forget your password, you will NOT be able to access the scale; the only way to correct this problem is to call your Easy Weigh Dealer who may have to clear out ALL of the scale's memory and completely reprogram the scale, which may or may not incur additional charges.

### To change the Password:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press   .
3. Type your new password and press .
4. Re-type your new password and press   .
5. You are back in the *Initial State*.

## Miscellaneous PLU Programming

---

The scale has a Miscellaneous PLU that can have 2 lines of 56 characters per line of Commodity Name or message and a 6 digit UPC code; however, most label formats support only 28 characters per line.

### To program the Misc. PLU:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press  .
3. You can now type the Commodity name or Message for Line 1 of the Misc. PLU. As you type, you will see the text in the Alpha Display.
4. When you are done with line 1, press .
5. Type the data you want for line 2 and press  2 times.
6. Type the UPC code you want for the Misc. PLU and press   .
7. You are back in the *Initial State*.



## Creating & Editing PLUs

---

Price Look Ups (PLUs) are the basic stock units of the LS-100 scale and are also referred to Stock Keeping Units (SKUs); however, these are really the same thing. PLUs have several properties which can be programmed by the user. The LS-100 can have up to 1000 PLUs. Please carefully read the following guidelines for PLU Creation.

### **PLU Creation Guidelines:**

The most important PLU property is its number; this is how the user can reference or “call-up” a PLU for use in Sales mode. For more commonly used PLUs, the LS-100 has 60 Speed Keys which can be programmed to automatically call-up a PLU. This saves time and increases throughput because less keystrokes are needed to call-up a PLU by Speed Key than by direct call-up. Because PLU numbers are usually 4 to 6 digits long, using direct call-up can take up to 7 key strokes! Using the Speed keys allows you to lower the keystroke count to 1 no matter how long the PLU number is. Careful consideration should be taken when deciding on PLU numbers. This can be especially true when you require the use of barcodes; if done incorrectly, you may have to reprogram ALL your PLUs on the LS-100 or your electronic cash register (ECR) or point of sale (POS) system! Because there are so many makes and models of cash registers and a myriad of POS software packages, it is not possible to denote a “works-for-all” instruction set for numbering PLUs. Instead, there are some simple principles you can follow:

- ❑ Try to keep the scale’s PLU number the same as the ECR/POS PLU number. This **ONLY** applies to scale items that the ECR/POS must scan.
- ❑ Try to keep each PLU’s UPC Code the same as the PLU number. Consequently, the **PLU # = UPC Code = ECR/POS PLU #**. The LS-100 makes the UPC Code the same as the PLU number for all new PLUs.

The second most important PLU property is PLU Type. Food can only be sold 1 of 2 ways: by count or by weight. This is why there are also 2 PLU Types.

When food is sold by weight, it must be accurately weighed and labeled with certain specific data whose requirements may change according to jurisdiction. **The minimum requirements for a By Weight PLU label are:** product name, price-per-pound, net weight, total price, and a packed on date. The net weight must be verifiable by an accurate scale.

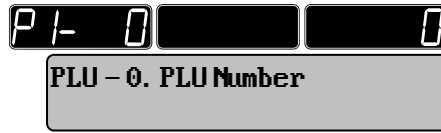
When food is sold by count (or volume), it must be accurately labeled with certain specific data whose requirements may change according to jurisdiction. **The minimum requirements for a By Count PLU label are:** product name, price-per-piece, net weight statement, total price, and a packed on date. The price-per-piece is usually expressed in the format "Q for P": Q is a piece count and must be greater than zero; P is a price and must be greater than or equal to zero. An example of a price-per-piece is "1 for \$3.49". The net weight statement is an estimate of the weight of the contents in the labeled package and must be in the format "O (lb/oz)" where O is the weight in ounces and (lb/oz) is the weight in pound and ounces. This weight is only an estimate and so long as it is slightly less than what the package weighs, you will be in compliance with the regulations.

A common misconception is that you can simply price something, let's say "fixed price", and then sell it like that. The reality is that this is true for non-food items; however, food must be sold either by weight or by count. Even non-scaled food items that seem to be "fixed price" and can be purchased in a supermarket are in fact sold by count. For example, a can of soup has a net weight statement on the package and when you buy it, the ECR/POS receipt will have a quantity (pieces) and a price. Another example is canned or bottled soda. These items are sold by volume, have a "net volume statement" and when you buy it the ECR/POS receipt will have a quantity (pieces) and a price. Additionally, if you were to measure the volume (or net weight) of the contents you would find that you are getting a slightly larger amount than stated on the package.

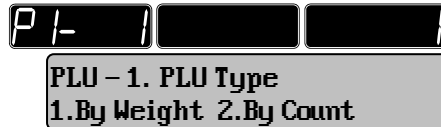
Now you are ready to program PLUs on the LS-100!

**To Create or Edit PLUs:**

1. Follow steps 1 to 3 of entering Main Menu.
2. Press . The displays will show:



3. Enter the PLU number you wish to create or edit. As you type the PLU number, you will see it in the Total Price display. The default PLU number in the Total Price Display ("0") can change after you program several PLUs. The default value is usually the next available (new) PLU number.
4. Press **PRINT** to go step 5 or press **ESC** **SET** to exit PLU Create & Edit and go back to the *Initial State*.
5. The next screen is PLU Type selection. Press  for By Weight or  for By Count.



6. The next screen is the Commodity Name Line 1. This is the first line of your PLU name descriptor. It can be up to 56 characters long; although, most label formats have a 28 character limit. Type the commodity name you want for line 1. The screen appears as follows:



7. You can press **SAVE** to store the PLU as-is and go to step 28 or you can press **PRINT** to continue to step 8.

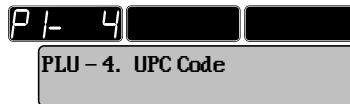
8. The next screen is the Commodity Name Line 2. This is the second line of your PLU name descriptor. It can be up to 56 characters long; although, most label formats have a 28 character limit. Type the commodity name you want for line 2. The screen appears as follows:



9. You can press **SAVE** to store the PLU as-is and go to step 28 or you can press **PRINT** to continue to step 10.
10. The next screen is the Group Code. This is where you assign the PLU to a group. Enter the group number you want; it must be from 1 to 99. As you type, the number will appear in the Total Price Display. The screen appears as follows:



11. You can press **SAVE** at to store the PLU as-is and go to step 28 or you can press **PRINT** to continue to step 12.
12. The next screen is the UPC Code. This is where you assign a UPC number to the PLU. The UPC Code defaults to be the same as the PLU number. Enter the UPC number you want; it must be from 0 to 999999. As you type, the number will appear in the Total Price Display. The screen appears as follows:



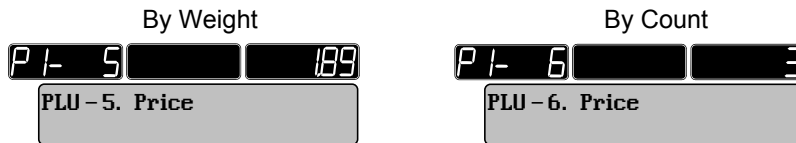
13. You can press **SAVE** to store the PLU as-is and go to step 28 or you can press **PRINT** to continue to step 14.

14.If you are creating a By Weight PLU, go to step 16. This is where you assign Piece count to a By Count PLU. The Pieces value defaults to be 1. Enter the number of pieces you want; it must be from 1 to 99. As you type, the number will appear in the Total Price Display. The screen appears as follows:



15.You can press **SAVE** to store the PLU as-is and go to step 28 or you can press **PRINT** to continue to step 16.

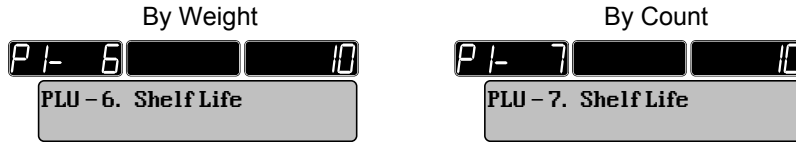
16.The next screen is the PLU Price. This is where you assign a price-per-pound for a By Weight PLU or price-per-piece for a By Count PLU. The price defaults to 0.00. Enter a price: the price must be from 0.00 to 9999.99. If you enter 0.00, then you will be able to change price during sales; if not, you may not be able to change the price (see *Advanced Programming, PLU Price Change* section.) The price will appear in the Total Price Display.



17.You can press **SAVE** to store the PLU as-is and go to step 28 or you can press **PRINT** to continue to step 18.

18.The next screen is the PLU Shelf Life. This is where you assign a Shelf Life in days that is used to compute the expiration date (Sell By.) The shelf life defaults to be 0. Enter the shelf life you want; it must be from 0 to 366. 0 will not print a Sell By Date, 1 will print Sell By Date = Packed On Date, 2 will print Sell By Date = Packed On Date + 1, etc. As you type, the shelf life will appear in the Total Price Display.

The PLU Shelf Life screen appear as follows:



19. You can press **SAVE** to store the PLU as-is and go to step 28 or you can press **PRINT** to continue to step 20.
20. If you are programming a By Weight PLU, go to step 22. The next screen is the PLU Net Weight Statement. The net weight is in ounces and defaults to be 0; if you leave it at 0 then you can weigh the By Count item in Sales Mode. Enter the net weight you want; it must be from 0 to 9999. The net weight will appear in the Total Price Display as follows:

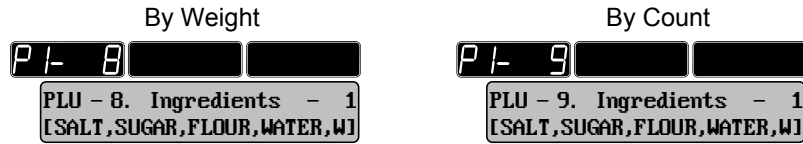


21. You can press **SAVE** to store the PLU as-is and go to step 28 or you can press **PRINT** to continue to step 24.
22. The next screen is the PLU Tare Weight. The tare weight is in pounds and defaults to be 0.00. This should be the tare weight of the container that will be used to package this particular PLU. If you are uncertain of the weight, please weigh all of your containers in Sales mode before programming PLUs. Enter the tare weight you want; it must be from 0.00 to 29.99. As you type, the tare weight will appear in the Total Price Display. The screen appears as follows:



23. You can press **SAVE** to store the PLU as-is and go to step 28 or you can press **PRINT** to continue to step 24.

24. The next screen is the PLU Ingredients Line 1. There are 10 lines of ingredients and 56 characters per line for a maximum total of 560 characters of ingredients per PLU. Type the ingredients you want for line 1. As you type, the ingredients will appear in the Alpha Display. The screens appear as follows:






25. You can press **SAVE** to store the PLU as-is and go to step 28 or you can press **PRINT** to continue to step 26.

26. The next screen is the PLU Ingredients Line 2. You can type the ingredients you want for this line and press **PRINT** to go to the next line of ingredients and repeat this step until you get to Line 10. Once you get to line 10, you can type the ingredients and then go to step 27. You could press **SAVE** at any time to store the PLU as-is and go to step 28.

27. You can press **PRINT** to save the PLU and return to step 3 or you can press **SAVE** to go to step 28.

28. The scale will store the PLU, print a *Verification Label* and then return to step 3.

**Note<sup>1</sup>:** You can also use the  and  keys to navigate through PLU programming. Pressing  is used to backup 1 step.

**Note<sup>2</sup>:** You can press **ESC** at any time during PLU programming in order to exit. If you press **ESC**, you will come to the following screen:



If you press  then the PLU will be stored; if you press  then the PLU will NOT be stored. Then you will see the following screen:

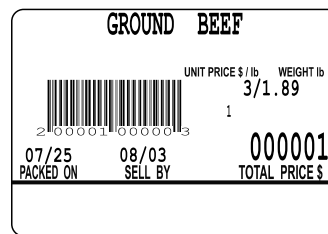
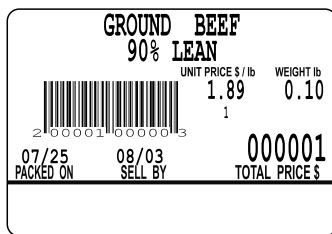
## 2. PLU Speed Keys

Press  to go back to the *Initial State*.

**Note<sup>3</sup>:** If you use the second language feature, the max number of characters per line is cut in half for all text fields; because, the second language feature uses DBCS (Double Byte Character System.)

### Verification Labels:

Verification labels print after you press  when you are programming a PLU. They look like regular labels BUT they have special data printed on them.



The simplest way to tell that a label is a verification label is that the Total Price field prints a value with 6 digits and no decimal point. This is actually the PLU number. Then you have the Net Weight field which will print the Tare Weight value of the PLU. Finally, there is the barcode which has no price embedded information; you'll see the 5 zeroes in the right-side portion under the bars. All other fields will print the same as a sales transaction.

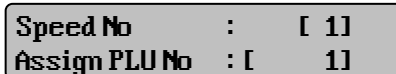


## Speed Keys

The LS-100 has 60 Speed Keys that can be assigned PLU numbers so that PLUs can be quickly accessed in Sales mode. By default, Speed Keys 1 to 60 are assigned to PLUs 1 to 60, respectively. If you need to reassign the Speed Keys follow the programming steps below.

### To Assign Speed Keys:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press **2**.
3. Press the Speed key you wish to view or assign and go to step 4  
**OR** press **ESC** **SET** to go back to the *Initial State*.
4. The Alpha Display will show you that key's current assignment.



Speed No : [ 1 ]  
Assign PLU No : [ 1 ]

5. You can:
  - Go back to step 3 to view or assign another key or...
  - Type a PLU number to assign to the currently selected Speed key and go to step 6 or...
  - Press **ESC** **ESC** **SET** to go back to the *Initial State*.
6. Press **PRINT** to save the new assignment and go to step 3.

## PLU Quick Price Change

The LS-100 allows you to quickly change the prices of PLUs without having to go through all of the steps of PLU programming.

### To do PLU Quick Price Change:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press **F1**.
3. Enter a PLU number or press a Speed Key that you wish to price change or press **ESC** **SET** to quit. The displays show:



P1  
Change Price  
Enter PLU Number

4. If the PLU you selected is By Weight then go to step 6. The Unit Price and Total Price displays will show the current Piece count of the selected By Count PLU.
5. You can type a new Piece count and press **PRINT** to store the new Piece count and go to step 6 or press **ESC** **ESC** **SET** to go back to the *Initial State*.
6. The Unit Price and Total Price displays will show the current price of the selected PLU.
7. You can type a new price and go to step 8 or press **ESC** **ESC** **SET** to go back to the *Initial State*.
8. The Total Price Display will show the new price while the Unit Price Display continues to show the current price. Press **PRINT** to store the new price and go to step 3.

## Deleting PLUs

---

The LS-100 can store up to 1000 PLU. Although this is enough for most applications, there may come a time that you might want to delete some PLUs to remove unused or erroneous PLUs. You can only delete 1 PLU at a time. To delete ALL PLUs see *Advanced Programming, Deleting All PLUs* section.

### To Delete PLUs:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press **8** **7**.
3. Enter a PLU number to delete and press **PRINT**.
4. If you are done, press **ESC** **SET**; otherwise, press **7** and go back to step 3.

When finished, the scale will be in the *Initial State*.

## Print Field Suppression

The LS-100 can prevent certain fields from printing on your labels. You may want to not print barcodes, store names, group codes, etc. Print Field Suppression allows you to do this.

### To suppress the printing of certain fields:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press  .
3. The first field is "Date: Packed On."

**1. Date: Packed On**

4. Press  to allow Packed On to print or  not to print.
5. The next field is "Date: Shelf Life." Press  to allow it to print or  not to print.
6. The next field is "Net Wt. Statement." Press  to allow it to print or  not to print.
7. The next field is "PLU Number." Press  to allow it to print or  not to print.
8. The next field is "Group Code." Press  to allow it to print or  not to print.
9. The next field is "Barcode." Press  to allow it to print or  not to print.
10. The next field is "Weight." This refers to the Net Weight for By Weight PLUs. Press  to allow it to print or  not to print.
11. The next field is "Unit Price." This refers to the Unit Price of By Weight and By Count PLUs. Press  to allow it to print or  not to print.
12. The next field is "Total Price." Press  to allow it to print or  not to print.
13. The next field is "Year Print." If Y is selected then dates will print with 2 digit years; otherwise, the year will not print. Press  to allow it to print or  not to print.

14. The next field is "Store Name." If 0 is selected then the Store Name will not print; if 1, then only Line 1 of the Store Name will print; if 2, then lines 1 and 2 will print. Currently, there are no 3 line Store Name label formats. Press , , or .
15. The next field is "Commodity Name." If 0 is selected then the Commodity Name will not print; if 1, then only Line 1 of the Commodity Name will print; if 2, then lines 1 and 2 will print. Press , , or .
16. The next field is "Ingredients." If N is selected then the Ingredients will not print; if 1, then only Line 1 of the Ingredients will print; if 2, then lines 1 and 2 will print, ..., if 9, then lines 1 to 9 will print, if Y then all lines will print. Press  to ,  or .
17. The last field is "Tare." If Y is selected then tares will print; if N then they will not print. Press  to allow it to print or  not to print.
18. Press   . You are at the *Initial State*.

**Note:** Although you may select things to print, if they are not in the label format, then the Print Field Suppression setting will be ignored. For example, if you use a label format that does not have ingredients then it does not matter what the Print Field Suppression setting for ingredients is set to: the ingredients will NEVER print on said labels.

## Temporary Date Print Inhibit

---

You can temporarily inhibit the printing of all dates. To enable or disable this feature, press the  key from the Main Menu. When this feature is ON you will see the rightmost Arrow Head Lamp turned ON in the Total Price Display; otherwise it will be OFF. If you cycle the AC power on the scale then this feature will be revert to its initial state of off.

## Sensor Settings

---

The LS-100 can use the Gap Sensor or the Peel Sensor to Sense gaps between labels. If you constantly get the error message “Gap Sensor Error,” you may need to clean the Gap Sensor Assembly; however, if you get constant label feed or “Gap Sensor Errors” please use this function to disable the Gap Sensor. After disabling the Gap Sensor you may need to use the Feed Adjust function in order to align the print.

### To Change the Sensor Settings:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press  .
3. The display will appear as follows:

**1. Uses Gap Sensor.**  
**2. Uses Peel Sensor.**

4. Press  to enable the Gap Sensor or  to disable it.
5. Press   to finish and return to Sales Mode.

Note that you may have change the Feed Adjustment value in order to properly align the printed text on the label. See the section titled **General Programming, Label Settings, Feed Adjustment**.

## Barcode Settings

---

The LS-100 can print 3 different barcode styles: UPC-A, UPC-B, and EAN-8. UPC-A is a 12 digit barcode and has been the predominant standard in the US. UPC-B is a 13 digit barcode that is usually employed whenever total prices exceed 4 digits. Finally, EAN-8 is an 8 digit European barcode that is equivalent to 8 digit UPC barcodes used in the US. EAN-8 is usually used to label very small packages. The LS-100 defaults to UPC-A barcodes. The reason for this is that 90% of all applications will employ this barcode. Only if you are very knowledgeable in barcoding, should you attempt to change any of these settings. Many “scanning trouble” errors can be attributed to improper barcode settings. Please read the next section carefully.

### **Common Barcode “blues”:**

The barcode is a complex and continuously evolving creature; there are volumes upon volumes of books relating to barcodes. However, with respect to price computing printing scales, there are a few simple rules to follow to minimize barcode errors.

First, read the *PLU Creation Guidelines* in *PLU Programming, PLU Create & Edit* section. Keeping PLU numbers equal to UPC Codes equal to ECR/POS PLU numbers will eliminate a great number of problems. Secondly, try to coordinate the scale programming and the ECR/POS programming. Many times there may be more than one party involved and their failure to communicate properly may result in errors later on. Finally, make sure that the ECR/POS system is set up to be able to understand UPC-A barcodes. UPC-A is also known as UPC-12, price embedded barcode, or random weight barcode.

If you have followed all of our directions but you are still having trouble, then the trouble is most likely on the ECR/POS side. You need to make sure that all of the ECR/POS scanner settings are correct as well as ECR/POS PLU data and settings. If the barcode scanner beeps, this is a sign that the scanner is functioning properly; most if not all scanners should be able to read any barcode printed by the LS-100. Because of this, the scanner should never be the source of barcode troubles unless the output data of the scanner is being rejected by the ECR/POS system; in which case, you must coordinate your scanner with your ECR/POS system.

One last tip regarding POS systems: POS systems are usually personal computers that “look like” ECRs; whereas, ECRs are hardware devices that are dedicated to ECR use and are not as flexible and upgradeable as PCs. Because POS systems are PCs in disguise, they need an operating system (like Windows® XP) and an application (like Microsoft® Word) that allow it to function as an ECR. There are a very large number of applications or “software packages” that are available for POS systems and these are not always written by big companies that have vast experience in the POS field. Because of this fact, you may need to check with your software supplier/publisher for support regarding further scanning errors. In closing, we would like to mention that most if not all scanning troubles are due to improper scale programming and improper ECR/POS programming; the later being the more common.

**To modify Barcode Settings:**

1. Follow steps 1 to 3 of entering Main Menu.
2. Press  .
3. Select the barcode style that you need: Press  for UPC-A,  for UPC-B, and  for EAN-8.
4. Press . The next screen shows you the barcode format string. This string defines what the numbers in the barcode represent. The default strings are: “2IIIIIVPPPP”, “02IIIIIVPPPP”, and “008IIII” for UPC-A, UPC-B, and EAN-8 respectively. We suggest that you only use these format strings because they are the most prevalent formats in use.
5. Press    to save the format and return to the *Initial State*, or if you need to change the string, simply type the string you want and then press   . The strings must fill the entire field: UPC-A must be 11 characters long, UPC-B must be 12 characters long, and EAN-8 must be 7 characters long. The checksum character is mandatory and will automatically be appended at the end of the format string. The table defines the script characters for the format string; if you use other characters than those mentioned below, your barcodes may not function properly. UPC-B is equivalent to EAN-13. See next page for format characters.

Script Characters	Definition
0 to 9	Will print the actual numbers 0 to 9.
I	UPC Code, acquired from the PLU.
V	Price checksum
P	Total Price
W	Net Weight

## Backlight Settings

The Alpha Display on the LS-100 has an electroluminescent backlight. It can set to be “always on” or to only turn on when the scale is in use (motion or key pressed.)

### To modify Backlight Settings:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press  .
3. Press  for “always on” or  for “Motion/Key press.”  
The default setting is 2.
4. Press    to save the setting and return to the *Initial State*.

## Date Format

The LS-100 can support the printing of various date formats:  
**Year-Month-Day, Month-Day-Year, and Day-Month-Year.**

### To modify the Date Format:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press  .
3. Press  for “Y-M-D”,  for “M-D-Y”, or  for “D-M-Y.” The default setting is 2.
4. Press    to save the setting and return to the *Initial State*.



## Auto Print Setting

---

When the LS-100 is in Pre-Pack mode, it is capable of auto printing labels. This feature is very useful for pre-packing; however, if the Auto Print Setting is set too low, the scale will tend to print more labels than you intend. This is remedied by the Auto Print Setting (APS.) The APS determines the amount of “weight change” required before the scale prints a new label. By default, the scale is set up for a “0.04 lb” weight change which should be good enough for most pre-pack applications. You can set it higher or lower.

### To modify the Auto Print Setting:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press  .
3. Enter the weight value you want. The default setting is “0.04 lb.”
4. Press    to save the setting and return to the *Initial State*.

## PLU Temporary Price Change Setting

---

The LS-100 can be set up to allow or disallow temporary price changes during Sales mode operations. For example, you may have a PLU that is priced at \$1.00/lb but you want your employees to be able to change the price for some customers or coupons: if you “allow temporary price changes” then they will be able to change the price during Sales mode; otherwise, they will not be able to temporarily change the prices.

Open priced PLUs are treated differently. Open priced PLUs are PLUs that are programmed with a zero price; when these are called up in Sales mode, their prices can be temporarily changed from zero regardless of the PLU Temporary Price Change Setting.

### To modify the PLU Temporary Price Change Setting:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press  .
3. Press  to allow price changes or press  to NOT allow price changes. The default setting is 1.
4. Press   to save the setting and return to the *Initial State*.

## PLU List

The LS-100 can display or print a list of all the scale's PLUs. This can be very helpful when you do not have the LS-100 Software Package or do not have access to a computer. Whenever you are generating a printout of the PLU list, you want to make sure that your scale is loaded with enough labels to complete the job. The scale will print a verification label for every PLU in the range that you specify, so it is recommended that you use a small label format when you do this. When you display the PLU, you cannot specify a range; therefore, you must toggle through ALL of the PLUs or press **PRINT** to finish prematurely. We recommend that you purchase the LS-100 Software Package if you are going to be dealing with over 100 PLUs.

### To view the PLU List:

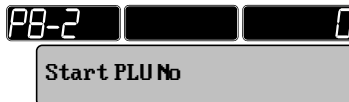
1. Follow steps 1 to 3 of entering Main Menu.
2. Press **8** **6**.
3. The PLUs will be listed in order starting from 1 to 999999. The Unit Price and Total Price displays will show the current PLU number and the Alpha Display will show Commodity Line 1 of the PLU.



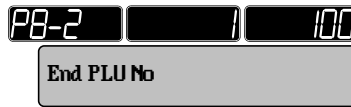
4. Use **▲** **▼** keys to navigate the PLU list or press **ESC** **ESC** **SET** to exit and return to the *Initial State*.

### To print the PLU List:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press **8** **2**.
3. Make sure that the printer is loaded with enough labels. Using the numeric keys, type the PLU number that you want the list to start from.



- As you type, the number will appear in the Total Price Display. Press **PRINT**. Now select the last (ending) PLU number for your list. The Unit Price Display will show the starting PLU number and the Total Price Display will show the ending PLU number. When the scale prints the labels, it will NOT wait for you to take them before it prints out the next one; therefore, we recommend that you do not thread the backing paper to the pick-up spool for this operation. Instead, have the backing paper feed out with the labels as they are printed so that they do not “peel-off.” When you are ready to start printing, press **PRINT**.



- The scale will sequentially go through every PLU in the range that you specified and print out a verification label for those PLUs that it finds.
- Once the scale is finished printing, press **ESC** **SET** to exit and return to the *Initial State*.

## Deleting All PLUs

If you want to start with a fresh PLU list you can clear the entire PLU memory. Be careful when you do this because you CANNOT recover the PLUs once you delete them.

### To delete ALL PLUs:

- Follow steps 1 to 3 of entering Main Menu.
- Press **8** **8**.
- Press **1** to delete all PLUs or press **0** if you changed your mind and do not want to delete the PLUs.
- Press **ESC** **SET** to exit and return to the *Initial State*.

## PLU Memory Status

---

If you ever want to know how much more memory space you have left or how many more PLUs you can program, you can use this feature. This can be very useful when you have a large number of PLUs or if you are constantly adding PLUs without deleting unused PLUs.

### To check PLU Memory Status:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press **8** **5**.
3. The Alpha Display will show you how many more PLUs you can program (1) and how many bytes of memory are left (2.)



4. When you are done viewing the data, press **ESC** **ESC** **SET** to exit and return to the *Initial State*.

## PLU Key & Calling Up PLUs

---

Sales mode is the *Initial State*. This is where you do all of your sales transactions. The basic “blueprint” of a sales transaction is:

- Start at the Initial State
- Select a PLU (Calling Up a PLU)
- Place the item on the scale
- Press **PRINT**
- Remove the item from the scale and apply the label

There are also many other functions and options that can add some more steps to the basic blueprint mentioned above, but it is more or less the same. One important note to mention is that the first 2 steps are interchangeable; that is, you can either select a PLU and then place the item on the scale or place the item on the scale and then select a PLU. Additionally, you may not need to press **PRINT** if you are in Auto-Print mode.

This blueprint will always work assuming that you have a non-zero Total Price. You may want to use a different tare than that of the PLU that you are calling up, use a different price, use a different piece count, or weigh the Net Weight Statement. In any case, these are features that are accessed using different keys that can add steps to this basic blueprint. All of these features will be covered in the sections to follow. You may have realized that this basic blueprint can work for By Count PLUs; although By Count PLUs need not be weighed, you can place them on the platter when you do a transaction.

Whenever you call up a PLU, you need to know whether the PLU is By Count or By Weight. Remember that By Count PLUs do not need to be weighed so you can save yourself the step of having to place the item on the scale. This can increase your productivity. The easiest way to tell the a PLU is By Count is that the Weight Display is blank. Additionally, the "\$/Pcs" Lamp will be on. Conversely, the "\$/lb" Lamp will be on for By Weight PLUs.

#### **Selecting or "Calling Up" a PLU:**

1. Start in Sales mode.
2. Type the PLU number and press **PLU** or press a Speed Key.

### **Miscellaneous PLUs**

---

The basic "blueprint" of a Misc. PLU sales transaction is:

- Start at the Initial State
- Type a By Weight price using the numeric keys or a By Count price using the numeric and **FOR** keys.
- Place the item on the scale
- Press **PRINT**
- Remove the item from the scale and apply the label

There are also many other functions and options that can add or some more steps to the basic blueprint mentioned above, but it is more or less the same. One important note to mention is that the first 2 steps are interchangeable; that is, you can either type a price and then place the item on the scale or place the item on the scale and then type a price. Additionally, you may not need to press **PRINT** if you are in Auto-Print mode.

## The Zero Key

---

You can use the **ZERO** key to correct a deviation from zero so long as there is no PLU called up and the "Net" Lamp is off.

You should never leave items on the platter for any long length of time; items should only be on the platter for a few minutes. Sometimes, leaving items on the platter for an extended period of time will cause a shift in the zero point that you will notice when you remove the item from the scale. The **ZERO** key can correct this problem. Sometimes small crumbs or debris may accumulate on the platter. The scale's AZTM (Automatic Zero Tracking Mechanism) will automatically "press" the **ZERO** key for you so that you can continue to use the scale even though the crumbs or debris may be on the platter. After a while, you may clean the platter and then notice a change in zero. You can use the **ZERO** key to correct this.

### Using the ZERO key:

1. Start in Sales mode making sure that there are no tares set or PLUs called up and that the platter is completely empty.
2. Press **ZERO**.

If this does not work, then:

1. Remove everything from the platter.
2. Turn the Power Switch off and then back on.

## The Tare Key

---

You can use the **TARE** key to override a PLU's preset tare, enter a sampled a tare, enter a manual tare, or clear a tare.

### Sampled tares:

Sampled tares are tares that are acquired from the weight on the platter. For example, if you have a container that you wish to tare but you do not know what the weight of it is you can:

1. Start from the *Initial State*.
2. Place the empty container on the platter.
3. Press **TARE**.

### Manual tares:

Manual tares are tares that you already know the weight of. For example, if you have a container that you wish to tare and you know it weighs "0.04 lb" you can:

1. Start from the *Initial State*.
2. Press **4** **TARE**.

### Clearing tares:

Both manual and sampled tares are cleared exactly the same way. For example, if you have a tare set on the scale and you want to clear it you can:

1. Remove all items from the platter.
2. Press **TARE**.

### Overriding preset tares:

Sometimes you may want to temporarily change the preset tare of a PLU. For example, if you have a PLU with a tare and want to use a different tare you can:

1. Start from the *Initial State*.
2. Follow the instructions for sample or manual tare.
3. Follow the instructions for Calling Up a PLU

The PLU will use the new tare that you entered in step 2 until the PLU is cleared.

### **Clearing preset tares:**

Sometimes you may want to temporarily remove the preset tare of a PLU. You can only do this **ONLY** if you set the *Allow Temporary Price Changes Setting* to allow price changes:

1. Start from the *Initial State*.
2. Follow the instructions for Calling Up a PLU
3. Press **C** **TARE**, then reenter the PLU price.

The PLU will have no tare until the PLU is cleared.

## **The Save Key**

---

You can use the **SAVE** key to prevent the Auto Clear Function (ACF) from working. The ACF automatically clears a PLU, tare, or unit price whenever the scale returns to gross zero.

### **Auto Clear Function, By Weight:**

1. Start from the *Initial State*.
2. (Optional) Enter a tare.
3. Type a price or call up a By Weight PLU.
4. Place an item on the scale so that the Total Price > 0.00.
5. Once the Stable Lamp is on, remove the item from the platter.
6. The PLU and/or the unit price and tare (if any) are automatically cleared.

### **Auto Clear Function, By Count:**

1. Start from the *Initial State*.
2. Call up a By Count PLU with a Unit Price > 0.00.
3. Press **PRINT**.
4. If the Total Price > 0.00, the scale will print a label and the PLU and is automatically cleared.

Whenever you wish to use the same tare, price, or PLU for many transactions you may want to use the **SAVE** key. The **SAVE** key does not automatically print, it only prevents ACF from happening. If you want to also automatically print you can use the **AUTO** key in conjunction with the **SAVE** key, or use the **PRE PACK** key instead.



Whenever the Save Lamp is on it means that the scale will not use the ACF. You can turn the Save function on or off by pressing **SAVE**.

**To turn the Save function on:**

1. Start from the *Initial State*.
2. Press **SAVE**. The Save Lamp turns on.
3. Type a price or call up a PLU.
4. (Optional) Place an item on the scale.
5. (Optional) Enter or change the Piece count and/or Unit Price.
6. Press **PRINT**.
7. (Optional) Remove the item from the platter.
8. The PLU and/or the unit price and tare (if any) are not cleared.

Steps 2 thru 5 can be done in any order.

**To turn the Save function off:**

1. Start from the *Initial State* with the Save Lamp on.
2. Press **SAVE**. The Save Lamp turns off.
3. The PLU and/or the unit price and tare (if any) are cleared.

## The Auto Key

---

You can use the **AUTO** key to have the scale print labels automatically. Whenever the Auto Lamp is on it means that the scale will print automatically. You can turn the Auto Print function on or off by pressing **AUTO** at any time. Auto print will only print automatically for By Weight PLUs; to print automatically for By Count PLUs you need to use the **PRE PACK** key. Additionally, the weight must return to gross zero (remove everything from the platter) before the scale will auto print again. This key is usually used with the **SAVE** key.

## The Pre-Pack Key

---

You can use the **PRE PACK** key to have the scale print labels automatically and not allow ACF to take place. Whenever the Pre Pack Lamp is on it means that the scale is in Pre-Pack mode. You can turn Pre-Pack on or off by pressing **PRE PACK** at any time.

Pre-Pack mode and **AUTO** + **SAVE** are very similar but differ in that Pre-Pack mode...

- Automatically prints By Count and By Weight PLUs
- Allows the use of the **X** key
- Does not need to return to gross zero in order to automatically print again

Pre-pack mode will automatically print again once the weight deviates by the amount specified in *Auto Print Settings*, for By Weight PLUs.

#### **To turn Pre-Pack on:**

1. Start from the *Initial State*.
2. Press **PRE PACK**. The Pre-Pack Lamp turns on.
3. Call up a PLU.
4. (Optional) Place an item on the scale.
5. If the Total Price > 0.00, the scale will automatically print.
6. (Optional) Remove the item from the platter.
7. The PLU and/or the unit price and tare (if any) are not cleared.

Steps 2 thru 4 can be done in any order.

#### **To turn Pre-Pack off:**

1. Start from the *Initial State* with the Pre-Pack Lamp on.
2. Press **PRE PACK**. The Pre-Pack Lamp turns off.
3. The PLU and/or the unit price and tare (if any) are cleared.

## **The Set Key**

---

You can use the **SET** key to enter the Main Menu from the *Initial State* or to go to the *Initial State* from the Main Menu.

## **The Esc Key**

---

You can use the **ESC** key to go from the Password request screen to the *Initial State* or to back up from any submenus within the Main Menu, until you get to the Main Menu. Once you are at the Main Menu you can use the **SET** key to go to the *Initial State*.

## The Func. Key (Void key)

---

The **Func.** key acts like a sales voiding key whenever you are in Sales mode. It is used to subtract the price of damaged or returned packages whose sales were issued by the scale. This is done in order for the scale to keep more accurate sales data. No labels are issued whenever you do a void.

### To use Void function:

1. Start from the *Initial State*.
2. Press **Func.**.
3. If the scale asks you for a password enter the password and then press **PRINT**; otherwise go to step 4.
4. Select the PLU you want to void by:
  - Pressing a Speed key or...
  - Typing the PLU number and then pressing **PRINT**
5. Enter the dollar amount that you wish to void. As you type, the amount will be displayed in the Total Price Display.
6. Press **PRINT**.

## The X Key

---

The **X** key acts like a label copier. In other words, it allows you to repeat the same sales transaction many times. The **X** key will not work when the Auto Lamp is on. When you use the **X** key in Pre-Pack mode the scale will print the labels without pausing between labels; but if Pre-Pack is off, the scale will wait for you to take the printed label before it issues another.

### To use the X key:

1. Start from the *Initial State*.
2. Call up a By Count PLU. Make sure that the Total Price > 0.00.
3. Press **X**, enter the number of labels you want, and press **PRINT**.
4. The scale will issue the labels you requested.

## The For Key

---

The **FOR** key is used to toggle between the Piece count and the Price for By Count PLUs. It is also used to convert By Weight PLUs into By Count PLUs.

### To use the For key with By Count PLUs:

1. Start from the *Initial State*.
2. Call up a By Count PLU.
3. (Optional) If you type any value or press the **C** key, only the Piece count value in the Unit Price Display will change.
4. Press **FOR**.
5. (Optional) If you type any value or press the **C** key, only the blinking Price value in the Total Price Display will change.
6. Press **FOR**. Goes back to step 3.

### To use the For key with By Weight PLUs:

1. Start from the *Initial State*.
2. Call up a By Weight PLU.
3. Press **FOR**.
4. The By Weight PLU temporarily turns into a By Count PLU; however, if you want the Net Weight Statement to print then **you must place the By Count item on the platter so that it can be sampled**. This is also true for By Count PLUs programmed with Net Weight = 0.
5. Go to step 3 of “**To use the For key with By Count PLUs.**”

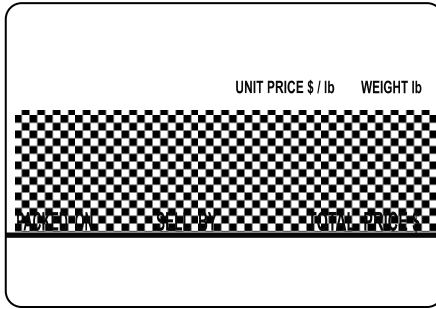
## The Feed Key

---

The **FEED** key is used to feed out labels from the printer. You can use the **FEED** key at any time in Sales mode. To use the **FEED** key just press it at and a label will be issued immediately.

Whenever you move or remove the cassette drawer mechanism from the printer bay, you should always use the **FEED** key to align the labels after you securely replace the cassette drawer mechanism. You should always press the **FEED** key 2 or 3 times to align the labels.

The labels issued from the **FEED** key have a special “checkered” pattern printed on them. This pattern is there to let you know the status of the thermal print head (TPH.)

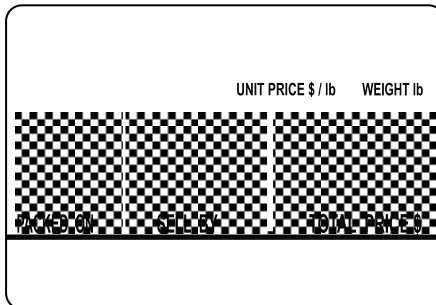
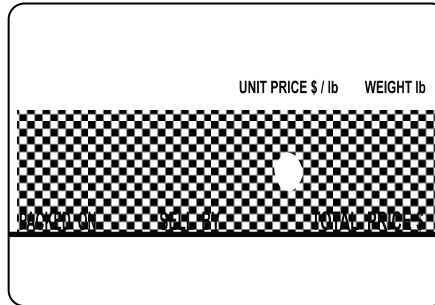


**A good checkered pattern:**

This is a good pattern; you can see that the pattern is uniform and has no missing or faded black squares. Also, the top and bottom edges of the pattern are parallel to the label edges.

**Needs cleaning:**

This pattern indicates that the TPH may need cleaning. The white “spot” inside the pattern may sometimes also have parts of the pattern inside the spot and the spot may not always appear on every label. Also may appear faded.



**May need service:**

There are two problems depicted here: the leftmost trouble spot is a very thin line of “missing” pattern; the rightmost trouble spot is a more pronounced missing line. Both will appear completely from top to bottom.

You can try cleaning the TPH, but this is most likely a scratched TPH.

If you clean the TPH (see *Maintenance* section) and any of these problems persist, then it is possible that the platen may be damaged or that the TPH has been scratched or damaged. Call your Easy Weigh Dealer for service. Do not attempt to service the TPH yourself! The TPH has high voltage and can get extremely hot during normal use and even hotter in some “damaged” conditions. If you attempt to repair the unit yourself, you risk injury and voiding your warrantee.

## The Print Key

---

The **PRINT** key is used to print labels in Sales mode, and as an Enter key in Programming mode. In Programming mode, the **PRINT** key and the **Enter** key are equivalent. The **PRINT** key can only issue labels in Sales mode when there’s a PLU called up & Total Price > 0.00. Even if you are in Auto or Pre-Pack modes, you can still use the **PRINT** key.

## The Clear Key

---

The **C** key is used to clear erroneous numeric entries and to “unload” or clear a PLU that has been called up in Sales mode.

### The Clear key with By Weight PLUs:

1. Start from the *Initial State*.
2. Call up a By Weight PLU.
3. If you press the **C** key:
  - if Unit Price = 0.00 then go to step 4, **or else...**
  - the Unit Price is changed to 0.00 and you go to step 3.
4. The PLU is cleared. You are at the *Initial State*.

In other words, pressing the **C** key once will clear the Unit Price; pressing it a second time will then clear the PLU.

The Clear key works similarly with By Count PLUs except that it will clear the Piece or Price depending on the state of the **FOR** key. Just like with By Weight PLUs, the first key press of the Clear key will set the Pieces (or Price) to 0; the second press will clear the PLU.

The Clear key is also used in Program mode to clear text. If the cursor is on a text field (Alpha Display) and you press **C**, then all of the text to the right of the cursor will be deleted.

For example, here we have the cursor in the middle of a text field. In this example, the cursor is represented by a solid black character block; in reality the cursor is constantly flashing.

```
PLU - 8. Ingredients - 1
[SALT,WATER,█UGAR,FLOUR,S]
```

If you were to press **C**, then the above text field would be changed as follows:

```
PLU - 8. Ingredients - 1
[SALT,WATER,█      ]
```

## 1/2 & 1/4 Keys: Fractional Pricing

The LS-100 has the ability to price By Weight items by the half pound (1/2) or the quarter pound (1/4); however, you can only do this at the time of sale. By Weight PLUs can only be programmed with price per pound; if you wish to use the **1/2** & **1/4** keys then you must have these keys enabled as well as have the Price Change enabled. This feature can only be enabled or disabled by an Easy Weigh Dealer. Additionally, pricing by the half or quarter pound is not legal for trade in most states; however, the LS-100 converts the fractional price into a price per pound value. By doing this conversion, the LS-100's fractional pricing feature can be used in all states; however, advertising or showing a price per 1/4 lb or price per 1/2 lb is still illegal.

The LS-100 does this conversion by multiplying the Unit Price by 2 whenever you press the **1/2** key and multiplying the Unit Price by 4 whenever you press the **1/4** key. This way the scale is always displaying a price per pound. You can only press these keys once per transaction or until the PLU and Unit Price display is cleared.

## X: Group Sales

The LS-100 has the ability to keep track of the sales transactions that it issues. It can keep sales records based on group sales, PLU sales, and scale sales. When you perform a Group Sales Report, the scale will print a report on active groups or the one you specify. Active groups are groups whose "sales > 0.00". This report is an X report because it does not clear the sales data. Reports can print on any style labels; however, some labels may require the use of more than 1 label per group reported.

### To generate the Group Sales Report:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press  .
3. Enter the group number you want a report for (1 to 99 or 0 for all active groups) and then press .
4. The scale will print the report. When the scale is done printing press    to return to the *Initial State* or, go to step 3 if you want a report for another group.

Below is an example of a Group Sales Report which is printed on a blank label:

### Group Reports explained:

The 1<sup>st</sup> line contains the group name. The 2<sup>nd</sup> line contains the report name. The 3<sup>rd</sup> line contains today's date and the scale number of the scale that generated this report. The 4<sup>th</sup> line contains the dollar amount sold for this group. The 5<sup>th</sup> line contains the number of transactions for this group. The 6<sup>th</sup> line contains the group number. The 7<sup>th</sup> line contains the date of the last time the Z report was taken. The Z report clears the sales records; therefore, this sample report is reporting on the sales period of 07/12/02 to 07/26/02.

```
Group : BEEF
      X : GROUP REPORT
07/26          SCALE : 1
Total Sold($):      161.77
Transaction :           19
Group Number :           1
LAST Z       :    07/12/02
```



## X: PLU Sales

When you perform a PLU Sales Report, the scale will print a report on active PLUs or the ones you specify. Active PLUs are PLUs whose "sales > 0.00". This report is an X report because it does not clear the sales data. Reports can print on any style labels; however, some labels may require the use of more than 1 label per group reported.

### To generate the PLU Sales Report:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press  .
3. Enter the PLU number you want a report for (1 to 999999 or 0 for all active PLUs) and then press .
4. The scale will print the report. When the scale is done printing press    to return to the *Initial State* or, go to step 3 if you want a report for another PLU.

Below is an example of a PLU Sales Report which is printed on a blank label:

### PLU Reports explained:

The 1<sup>st</sup> line contains the PLU name. The 2<sup>nd</sup> line contains the report name. The 3<sup>rd</sup> line contains today's date and the scale number of the scale that generated this report. The 4<sup>th</sup> line contains the dollar amount sold for this PLU. The 5<sup>th</sup> line contains the number of transactions for this PLU. The 6<sup>th</sup> line contains the total weight sold for this PLU (By Weight) or the total pieces sold (for By Count.) The 7<sup>th</sup> line contains the group number. The 8<sup>th</sup> line contains the date of the last time the Z report was taken. The Z report clears the sales records; therefore, this sample report is reporting on the sales period of 07/12/02 to 07/26/02. The Active PLUs report contains sales data for the Miscellaneous PLU.

```
PLU : GROUND BEEF
      X : PLU REPORT
07/26          SCALE : 1
Total Sold($):      101.02
Transaction :           12
Total Weight :       3.51 lb
PLU Number  :           1
LAST Z      :       07/12/02
```

## Z: Scale Sales

When you perform a Scale Sales Report, the scale will print a Scale Sales Report and then clear all sales data. Once you do this report you cannot do any of the X reports (group or PLU reports) until you generate some sales.

### To generate the Scale Sales Report:

1. Follow steps 1 to 3 of entering Main Menu.
2. Press  .
3. You can:
  - Press  **PRINT** to print the report, clear the sales data, and go to step 4 or...
  - Press **ESC** **ESC** **SET** to return to the *Initial State* without clearing any sales data.
4. When the scale is done printing press **ESC** **ESC** **SET** to return to the *Initial State*.

Below is an example of a Scale Sales Report which is printed always on two labels:

### Scale Reports explained:

The 1<sup>st</sup> line contains the report name and the page number (1 of 2.) The 2<sup>nd</sup> line contains today's date and the scale number of the scale that generated this report. The 3<sup>rd</sup> line contains the number of refunds done: the number of times the **Func.** Key was

```
Z : SCALE REPORT      1/2
07/26                SCALE : 1
Refunds      :          2
Refunds ($) :        1.23
Transaction  :          20
Total Sold($) :       350.12
Total WEIGHT :       53.01 lb
```

used. The 4<sup>th</sup> line contains the dollar amount refunded. The 5<sup>th</sup> line contains the number of transactions for this scale. The 6<sup>th</sup> line contains the total dollar amount sold for this scale. The 7<sup>th</sup> line contains the total weight sold on this scale.

Z : SCALE REPORT 2/2  
07/26 SCALE : 1

Number of Z : 23  
NRGT (\$): 2768.20  
LAST Z : 07/12/02

**Scale Reports page 2:**

The 1<sup>st</sup> line contains the report name and the page number (2 of 2.) The 2<sup>nd</sup> line contains today's date and the scale number of the scale that generated this report. The 3<sup>rd</sup> line contains the number of times that the Z report has been taken on this scale.

The 4<sup>th</sup> line contains the Non-Resetting Grand Total (NRGT) dollar amount. The 5<sup>th</sup> line contains the date of the last time that the Z Scale Report was done.

**Note:** If you do not wish to use sales reports, please inform your Easy Weigh Dealer during the installation of the scale. Only licensed individuals are allowed to change this option.

**NRGT and Number of Z:**

These 2 counters cannot be erased or cleared. They serve as an "odometer" of scale use.

## Scale to Scale Data Transfer

You can transfer scale data from one scale to another; in essence, you can clone a scale. **This is NOT a network function nor can it become one. Scale to scale data transfer uses serial (RS-232) communication to transfer data, which can only be wired from 1 scale to another.** For Ethernet TCP/IP networking availability, please contact us or visit our website at:

[www.easyweighscales.com](http://www.easyweighscales.com)

You need to purchase the Scale-to-Scale cable in order to connect 2 LS-100s together. There is also a PC-to-Scale cable that is included with the LS-100 Software Package. You can also make either cable yourself by using the following diagrams:

<u>LS-100 Scale-to-Scale Cable</u>			
	LS-100 DB-9 Pin Male	LS-100 DB-9 Pin Male	
TX	3	2	RX
RX	2	3	TX
SG	5	5	SG

<u>LS-100 PC-to-Scale Cable</u>			
	LS-100 DB-9 Pin Male	IBM PC DB-9 Pin Female	
TX	3	2	RX
RX	2	3	TX
SG	5	5	SG
		4	DTR
		6	DSR
		7	RTS
		8	CTS

### To transfer data from Scale-to-Scale:

1. Place both scales together.
2. Make sure that the Power Switch is off on both scales.
3. Connect the Scale-to-Scale cable: it does not matter which side you plug where because both sides of the cable are identical.
4. Turn both scales on and wait for them to go to the *Initial State*.
5. **On the scale with the data (“Source” scale):**
  - Follow steps 1 to 3 of Entering Main Menu.
  - Press  .
6. The Source scale will beep when done.

## PC to Scale Data Transfer

---

You can use your PC to store data files for the LS-100 scale, all you need to do is to purchase the LS-100 Software Package. Contact your local Easy Weigh Dealer for purchasing options. **This is NOT a network function nor can it become one. PC to scale data transfer uses serial (RS-232) communication to transfer data, which can only be wired from 1 PC to 1 scale.** For Ethernet TCP/IP networking availability, please contact us or visit our website at:

**[www.easyweighscales.com](http://www.easyweighscales.com)**

### To transfer data from PC-to-Scale:

1. Place the PC and the scale together.
2. Make sure that the Power Switch is off on both the PC and the LS-100 scale.
3. Connect the PC-to-Scale cable: the female side goes to the PC and the male side goes to the LS-100.
4. Turn the PC on, then turn the scale on, and wait for the scale to go to the *Initial State*.
5. Follow the instructions that accompanied your LS-100 Software Package.

## Self Test

---

The LS-100 has a several self test features that can help you determine if things are working correctly. However, these features should only be used by an Easy Weigh Dealer. Details regarding these features are located in the LS-100 Service Manual available **ONLY** to Easy Weigh Dealers.

# Appendix A: Label Format Library

You can use this section to determine the label format number that corresponds to the various label styles that the LS-100 supports. For the most up-to-date Label Format Library, please look at the *Label Format Manual* located on our website.

To change the label format number from the Main Menu:

Press  , enter the format # and press  .

Label Style	Label Format Numbers			Details (mm)
				Easy Weigh 40x60
				CAS 30x60 #8000
				CAS 40x60 #8010
				CAS 60x60 #8020

To change the label format number from the Main Menu:

Press **7** **2**, enter the format # and press **PRINT** **ESC**.

Style	Label Format Numbers			Details (mm)
				CAS 60x60 #8020
				CAS 50x60 #8030
				CAS 60x60 #8040
				Kubota 35x54 #3600
				Kubota 53x54 #3610

**To change the label format number from the Main Menu:**

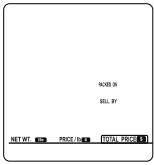



Press **7** **2**, enter the format # and press **PRINT** **ESC**.

Label Style	Label Format Numbers			Details (mm)
				Digi NBI 62x40
				TEC 40x48 #2810
				TEC 54x48 #2730
				TEC 68x48 #2834
				TEC 51x58 #4900



**To change the label format number from the Main Menu:**

Press **7** **2**, enter the format # and press **PRINT** **ESC**.

Label Style	Label Format Numbers			Details (mm)
	 <p style="text-align: center;">123</p>	 <p style="text-align: center;">124</p>	 <p style="text-align: center;">125</p>	<p>TEC 63x58 #6158</p>

Note on Label Formats:

Label formats are subject to change without notice. Easy Weigh or any Easy Weigh Dealer or Distributor is not obligated to inform you or supply you with firmware updates which may or may not include label formats. We do constantly update our literature so as to keep it up-to-date. This includes printed and electronic literature. As a service to our Dealers, Distributors, and you the customer, we make every effort to keep our website and Customer Service centers up to date.

The most “up-to-date” label formats or Label Format Manual may not always reflect your version scale. You can acquire any new formats that you may not have by contacting your Easy Weigh Dealer. There may be a service charge for this request as this is not part of any warrantee or obligation.

You can always find the latest Label Format Manual at:  
<http://www.easyweighscales.com/docs/labelformatmanual.htm>

Notes:

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

**You Easy Weigh Dealer is:**





*Easy Weigh*

[www.atronsystems.com](http://www.atronsystems.com)

Copyright 2005, All rights reserved.

800-17007-02000E